

**REMARKS**

Claim Rejections - 35 USC § 112

I. Claims 47-49 were rejected under 35 U.S.C. 112, first paragraph. Those claims have been cancelled without prejudice.

II. Claims 35-54 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The rejection stated that in claims 35 and 55, it is unclear how a magnetic field energizes or stimulates the electronic tag.

Attention is directed to paragraphs [0061], [0076], [0145-0146], of the published application, where both magnetic and electromagnetic is used. One of skill would understand that the detector generates the magnetic field which energizes/stimulates the tag, e.g., an RFID detector/tag set. The specification has been amended to consistently use "electromagnetic" when referring to the magnetic field. No new matter is entered by this amendment.

It is noted that the invention is not a new RFID detector/tag circuitry or principle of operation. It is a well-known design in which, e.g., an electromagnetic field energizes a capacitor, through induced currents. When this capacitor has accumulated enough energy it stimulates the internal transponder circuitry that emits a signal that is received by the reader. So

the fundamental term is energizes. Inversely this transponder is of no use if not placed in an electromagnetic field, i.e., that is why it is called a passive transponder.

See also the discussion at paragraph [0076]: "The antenna 145 is capable of emitting a magnetic field oriented towards the underside of the animal 100 wearing the device which is the subject of the present invention. Thus, as soon as the animal wearing it is on top of a female, the device establishes a communication with the electronic tag worn by said female 120."

Further see, paragraph [0077]: "Through programming of the controlling means 150, the device 110 is capable of reading the identifiers of the transponders located within range of its antenna 145, when the mounting sensor 140 detects a mounting attempt, and to store these identifiers in the RAM 160 with information of the date and time of the mounting attempt. Date and time are provided by the clock 170."

This feature has been clarified in the claims. No new matter is entered by way of the amendments.

Thus, this feature is enabled.

III. Claims 39, 40, and 49 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 39, when the detecting animal attempts to mount the female animal by being on top of the female animal, the detector, which emits an electromagnetic field, is sufficiently proximate the electronic tag to activate the electronic tag. The electronic tag being detector-activated by the detecting animal being on top of the female animal establishes a communication between the detector and the electronic tag worn by the female animal. Wherein upon being activated, said electronic tag emits an identification of said female animal picked up by the detector. This data is therefore available to be written onto the detector.

The claims have been amended to remedy the above-stated bases of rejection. No new matter is entered by these amendments.

Withdrawal of the rejections is therefore solicited.

Claim Rejections - 35 USC § 102

Claims 35, 36, 40, 47, and 54 were rejected under 35 U.S.C. 102(b) as being anticipated by McAlister US 4,503,808.

McAlister may be solar powered (column 5, lines 43-48).

However, McAlister does not disclose an electronic tag that is a passive tag without any source of energy and generating a signal only upon detector-activation, the electronic tag not generating signals until being detector-activated by the

detecting animal making a mounting attempt on the female animal by the detecting animal being on top of the female animal.

Although McAlister does detect a unique code information, there is no disclosure of the McAlister tag, when activated being solar powered, emitting an identification of said female animal in an identifying signal modulating the electromagnetic field [of the solar energy], which identifying signal is picked up by the detector.

Applicant also points out that the "functional language" identified by the rejection must be given patentable weight, where, as in this case, such language requires the claimed element to necessarily have certain characteristics (see paragraph [0061] re: the electronic tag's being configured for placing at an organ of the female animal). When those characteristics are not in the prior art, the claimed feature is patentably distinguishing.

As to claim 36, if the tag is solar-powered, it cannot be configured to be placed in a digestive tract of the female animal and remain functional. If the tag is not solar powered, it is not passive as recited.

Accordingly, McAlister does not anticipate.

Claim Rejections - 35 USC § 103

Claim 38 was rejected under 35 U.S.C. 103(a) as being unpatentable over McAlister US 4,503,808 in view of Blair 4,895,165.

Applicant respectfully disagrees.

Blair does not teach to identify cows that having had a mounting attempt by a detecting animal.

Rather, Blair discloses looking for motion activity of cows (but makes no teachings as to identifying mounted cows).

The transponder used by Blair is a read-write (RW), hence this transponder contains a readable memory that can store data of recorded activity and a permanent ID. Each cow carries a device that has a passive transponder and also carries its own energy to write in the memory. The present invention does not use this approach. If one of skill were to adapt the teachings of Blair, the claimed invention does not result, as Blair does not teach to use an RFID tag/detector in the manner claimed.

Reconsideration and allowance of the

Allowable Subject Matter

Claims 35-55 were indicated to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraphs, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Traverse

McAlister discloses a tag which is powered by heat or the sun and constantly emits a signal when powered.

The McAlister tag is not an electronic tag being a passive tag free of any power source and not being activated by and generating any signals until being detector-energized.

The McAlister detector does not emit an electromagnetic field energizing the McAlister tag when the tag is located in the organ of the female animal and the detector is attached on the detecting animal.

McAlister discloses detecting standing heat of an animal (12) where a generator (18) secured to the body of the animal (12) generates an identification signal uniquely identifying the animal (12). However, the McAlister system continuously emits a signal that is received by the male at all times of the day.

McAlister does not disclose that, upon being activated, said electronic tag emits an identification of said female animal in an identifying signal modulating the magnetic field and picked up by the detector, said detector comprising an identifier configured for identifying said passive electronic tag based on the identification within the identifying signal emitted by the electronic tag.

As amended, the claims are believed to distinguish both the recited electronic tag and the recited detector from the teachings of the applied art.

The McAlister system does not appear to be suitable to include an electronic tag that comprises a support configured to be placed in a digestive tract of the female animal, or fixed at the ear with an ear-tag. The main point is that the electronic tag may be placed in the body of the animal OR fixed at the body, especially at the ear. This is supported by the specification in paragraph [0061] : "integrating a transponder in a tag at the animal's ear", and further in paragraph [0147]: "the transponder is attached to the ear of the animal".

The McAlister system does not disclose the electronic tag being an RFID tag and the detector being an RFID reader.

The McAlister system does not disclose a verticality sensor to activate the said detector.

The McAlister system does not disclose a pressure sensor configured to sense pressure exerted on the back of said female animal, said pressure sensor configured to be placed under the belly of the detecting animal wearing the detector, to activate the said detector.

The McAlister system does not disclose a temperature sensor, said temperature sensor configured to be placed under the belly of the detecting animal wearing the detector, to activate the said detector.

The McAlister system does not disclose a motion sensor, movements of the detecting animal wearing the device being sensed to activate the said detector.

The McAlister system does not disclose that the identifier comprises an image processing part for identification of the female animal.

The McAlister system does not disclose the further combination of said electronic tag being an RFID tag, said detector an antenna configured for emitting the magnetic field toward the RFID tag for stimulating the RFID tag, a controller, a program memory, a communication interface (175), and a communication module, and the device further comprising a mounting sensor configured to activate said detector.

Reconsideration and allowance of all the claims are solicited.

This amendment is believed to be fully responsive and to put the case in condition for allowance. Entry of the amendment, and an early and favorable action on the merits, are earnestly requested. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Should there be any matters that need to be resolved in the present application; the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.



The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Roland E. Long, Jr./  
Roland E. Long, Jr., Reg. No. 41,949  
209 Madison Street  
Suite 500  
Alexandria, VA 22314  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

REL/jr